



State of Illinois

# ENVIRONMENTAL PROTECTION AGENCY

USEPA

Mary A. Gade, Director

2200 Churchill Road, Springfield, IL 62794-9276

217/524-3300

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WMD RCRA  
RECORD CENTER

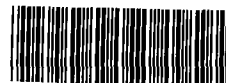
NOV 15 1993

Part A

(A.4.1)

January 19, 1993

US EPA RECORDS CENTER REGION 5



1002390

Mr. Thomas D. Gentner, P.E.  
Morton International, Inc.  
100 North Riverside Plaza  
Chicago, Illinois 60606-1596

Re: 0890100007 -- Kane County  
Morton International  
ILD095309647  
Log No. C-611-M-1  
Received: November 2, 1992  
RCRA-Closure

Dear Mr. Gentner:

The closure plan modification request submitted by you and prepared by IT Corporation has been reviewed by this Agency. Specifically, the Agency is responding to the report entitled "Final Report, Soil Pile Closure Sampling, Morton International, Batavia, Illinois," which is dated October 28, 1992. Your final closure plan to close the hazardous waste waste pile (S03) storage area is hereby approved subject to the following conditions and modifications.

1. Closure activities must be completed by July 1, 1993. When closure is complete the owner or operator must submit to the Agency certification both by the owner or operator and by an independent registered professional engineer that the facility has been closed in accordance with the specifications in the approved closure plan. This certification must be received at this Agency within sixty (60) days after closure, or by September 1, 1993. These dates may be revised pending review of any submittal required by Condition 3 below.

The attached closure certification form must be used. Signatures must meet the requirements of 35 Ill. Adm. Code Section 702.126. The independent engineer should be present at all critical, major points (activities) during the closure. These might include soil sampling, soil removal, backfilling, final cover placement, etc. The frequency of inspections by the independent engineer must be sufficient to determine the adequacy of each critical activity. Financial assurance must be maintained for the units approved for closure herein until the Agency approves the facility's closure certification.

The Illinois Professional Engineering Act (Ill. Rev. Stat., Ch. 111, par. 5101 et. seq.) requires that any person who practices professional engineering in the State of Illinois or implies that he (she) is a professional engineer must be registered under the Illinois Professional Engineering Act (par. 5101, Sec. 1). Therefore, any certification or engineering services which are performed for a closure plan in the State of Illinois must be done by an Illinois P.E.

Plans and specifications, designs, drawings, reports, and other documents rendered as professional engineering services, and revisions of the above must be sealed and signed by a professional engineer in accordance with par. 5119, sec. 13.1 of the Illinois Professional Engineering Act.

As part of the closure certification, to document the closure activities at your facility, please submit a Closure Documentation Report which includes:

- a. The volume of waste and waste residue removed. The term waste includes wastes resulting from decontamination activities.
- b. A description of the method of waste handling and transport.
- c. The waste manifest numbers.
- d. Copies of the waste manifests.
- e. A description of the sampling and analytical methods used including, sample preservation methods and chain-of-custody information.
- f. A chronological summary of closure activities and the cost involved.
- g. Color photo documentation of closure. Document conditions before, during and after closure.
- h. Tests performed, methods and results.

The original and two (2) copies of all certifications, logs, or reports which are required to be submitted to the Agency by the facility should be mailed to the following address:

Illinois Environmental Protection Agency  
Division of Land Pollution Control -- #33  
Permit Section  
2200 Churchill Road  
Post Office Box 19276  
Springfield, Illinois 62794-9276

2. To ensure the clean-closure requirements of 35 IAC 725.211, 725.214 and 725.328(a) are met, all soil which remains in and around the S03 unit must meet the following cleanup objectives (unless otherwise noted, the unit of concentration associated with the values in the table is mg/kg):

PARAMETER	Soil Cleanup Objective mg/kg	ADL <sup>1</sup> mg/kg	Suggested SW-846 Method
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#### Organic Parameters

1,1-Dichloroethane	0.7	0.00002	8010
1,2-Dichloroethane	0.005	0.00002	8010
1,1-Dichloroethylene	0.007	0.00003	8010
cis-1,2-Dichloroethylene	0.07	0.0001	8021
trans-1,2-Dichloroethylene	0.1	0.00002	8010
1,2-Dichloropropane	0.005	0.00006	8010
Ethylbenzene	0.7	0.00005	8021
Tetrachloroethylene	0.005	0.0001	8010
Toluene	1.0	0.001	8020
Trichloroethylene	0.005	0.00001	8010
Vinyl Chloride	0.002	0.00006	8010
Xylenes	10.0	0.002	8020

#### Inorganic Parameters

Arsenic (TCLP) <sup>2</sup>	0.05	mg/l	0.01	7061
Barium (TCLP)	2.0	mg/l	0.2	7080
Cadmium (TCLP)	0.005	mg/l	0.002	7131
Chromium (TCLP)	0.1	mg/l	0.01	7191
Lead (TCLP)	0.0075	mg/l	0.005	7421
Mercury (TCLP)	0.002	mg/l	0.0002	7471
Nickel (TCLP)	0.1	mg/l	0.04	7520
Selenium (TCLP)	0.05	mg/l	0.005	7740, 7741
Silver (TCLP)	0.05 <sup>3</sup>	mg/l	1.0	7760

NOTES: (1) ADL = Acceptable detection limit; for guidance only.

(2) TCLP = Cleanup objective based on the analysis of the extract from the Toxicity Characteristic Leaching Procedure -- Method 1311 of Test Methods for Evaluating Solid Waste, Third Edition (SW-846).

- (3) Acceptable Detection Limits have been set by the Agency to aid in the evaluation of residual soil contamination for those substances where health or environmentally based cleanup objectives are below commonly attainable detection limits. The stated cleanup objectives remain the goal; however, the Agency will accept analyses as proof of acceptable cleanup if these analyses (1) do not detect the parameter of concern, (2) have a detection limit which is at or below the ADL for that parameter and (3) were conducted in accordance with the quality assurance criteria set forth in SW-846.
3. Based upon the analytical results presented in Section 4.0 of the October 28, 1992 report, additional soil sampling and analysis is necessary to meet the clean-closure requirements of 35 IAC 725.211, 725.214, and 725.358(a). Soil samples shall be collected at a depth of 18-24 inches below the ground surface, near those locations where the cleanup objectives are exceeded. If the analytical results of this sampling indicate that the cleanup objectives are met, then the Closure Documentation Report may be submitted by the date specified in Condition 1 above. However, if the analytical results show that the cleanup objectives are not met, then the Agency shall be notified of this in writing within five (5) days after the analytical results are received. Furthermore, a proposal to remediate the contaminated soil shall be submitted to the Agency for review and approval within sixty (60) days after the analytical results are received.
4. The October 28, 1992 report indicates that the presence of methylene chloride and chloroform detected in the soil samples is the result of laboratory contamination. If it is indeed suspected that lab contamination is a problem, then the following information must be provided to support this claim:
  - a. An identification of all samples collected and analyzed as part of the sampling/analysis effort, including all field blanks, trip blanks and laboratory blanks;
  - b. The date each one of the samples identified above was collected and the date it was analyzed;
  - c. The method used to collect, store and transport each sample;
  - d. The methods used to prepare the samples for analysis, including an identification of any reagents used;
  - e. The method used to analyze each sample;
  - f. The final laboratory report sheet documenting the results of the analyses conducted on each sample;

- g. A discussion of the quality assurance/quality control used by the laboratory while conducting the analyses;
- h. An identification of the source of the contamination.
- i. A discussion of the above data. This discussion should provide an evaluation of all data and demonstrate that the contaminant detected in the samples is the result of laboratory contamination which could not be avoided using standard lab procedures.

In addition to field blanks, the facility may want to collect samples from areas unaffected from the operations of the facility. The detection of any man-made organic compounds in these samples would also indicate that laboratory contamination may be a problem. Such blanks may be more representative of the adsorption of laboratory contaminants onto the actual soil samples of concern. Finally, it should be noted that QA/QC procedures meeting the requirements of SW-846 should be carried out for all sampling/analysis efforts.

- 5. If groundwater is encountered during the soil sampling activities prior to reaching soil which meets the cleanup objectives, then a plan to investigate for potential groundwater contamination must be submitted to the Agency for review and approval. Such a plan must be submitted within sixty (60) days after the date that the analytical results are received which indicate that soil contamination extends to the water table. In addition, the Agency shall be notified in writing of this discovery within five (5) days after these analytical results are received.
- 6. The proposed groundwater investigation plan should be developed in a manner similar to that required for groundwater monitoring programs set forth in 35 IAC 724, Subpart F. Guidance for the development of such a plan can be found in the USEPA documents entitled RCRA Groundwater Technical Enforcement Guidance Document and Handbook of Suggested Practices for the Installation of Groundwater Monitoring Wells.
- 7. The Illinois Pollution Control Board recently finalized regulations establishing groundwater quality standards for the State of Illinois (see 35 IAC 620). As such, the Agency must ensure that the soil cleanup objectives established for this facility will not cause any future violations of these standards. Therefore, unless site specific information is submitted to the Agency to indicate otherwise, soil cleanup objectives for this site will be based upon the protection of Class I groundwater (potable resource groundwater). Guidance regarding the information which must be provided to the Agency for review and approval demonstrating that the soil cleanup objectives should be based upon the protection of Class II groundwater (general resource groundwater) is provided in Attachment A.
- 8. Along with your certification of closure, please submit a letter requesting withdrawal of your facility's Part A application.

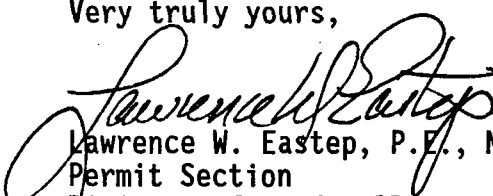
9. If the Agency determines that implementation of this closure plan fails to satisfy the requirements of 35 Ill. Adm. Code, Section 725.211, the Agency reserves the right to amend the closure plan. Revisions of closure plans are subject to the appeal provisions of Section 40 of the Illinois Environmental Protection Act.
10. A request for release of financial assurance documents should be included with the closure certification documents.
11. Under the provisions of 29 CFR 1910 (51 FR 15,654, December 19, 1986), cleanup operations must meet the applicable requirements of OSHA's Hazardous Waste Operations and Emergency Response standard. These requirements include hazard communication, medical surveillance, health and safety programs, air monitoring, decontamination and training. General site workers engaged in activities that expose or potentially expose them to hazardous substances must receive a minimum of 40 hours of safety and health training off site plus a minimum of three days of actual field experience under the direct supervision of a trained experienced supervisor. Managers and supervisors at the cleanup site must have at least an additional eight hours of specialized training on managing hazardous waste operations.
12. All samples shall be analyzed individually (i.e., no compositing). Sampling and analytical procedures shall be conducted in accordance with Test Methods for Evaluating Solid Wastes, Third Edition (SW-846) and Attachment 7 to this Agency's closure plan instruction package. When a SW-846 (Third Edition) analytical method is specified, all the chemicals listed in the Quantitation Limits Table for that method shall be reported unless specifically exempted in writing by the Agency. When visually discolored or contaminated material exists within an area to be sampled, horizontal placement of sampling locations shall be adjusted to include such visually discolored and/or contaminated areas. Sample size per interval shall be minimized to prevent dilution of any contamination. Apparent visually contaminated material within a sampling interval shall be included in the sample portion of the interval to be analyzed. To demonstrate a parameter is not present in a sample, analysis results must show a detection limit at least as low as the PQL for that parameter in the third edition of SW-846. For inorganic parameters, the detection limit must be at least as low as the RCRA Groundwater Detection Limits, as referenced in SW-846 (Third Edition) Volume 1A, pages TWO-29 and TWO-30, Table 2-15. If possible, your sampling program should be extensive enough to determine the lateral and vertical extent of contamination to the detection limit (PQLs) referenced above.
13. If clean closure cannot be achieved pursuant to 35 IAC 725.358(a), then a modified closure plan and a post-closure plan prepared pursuant to 35 IAC Section 725.358(b) must be submitted to the Agency for review and approval within 60 days of such a determination.

14. 35 IAC 721.131 F001 through F005 wastes must be disposed in accordance with 35 IAC Part 728.
15. To avoid creating another regulated storage unit during closure, it is recommended that you obtain any necessary permits for waste disposal prior to initiating excavation activities. If it is necessary to store excavated hazardous waste on-site prior to off-site disposal, do so only in containers or tanks for less than ninety (90) days. Do not create regulated waste pile units by storing the excavated hazardous waste in piles. The ninety (90) day accumulation time exemption (35 IAC 722.134) only applies to containers and tanks.
16. Please be advised that the requirements of the Responsible Property Transfer Act (Public Act 85-1228) may apply to your facility due to the management of RCRA hazardous waste. In addition, please be advised that if you store or treat on-site generated hazardous waste in containers or tanks pursuant to 35 IAC 722.134, those units are subject to the closure requirements identified in 35 IAC 722.134(a)(1).
17. All hazardous wastes that result from this project are subject to annual reporting as required in 35 IAC 722.141 and shall be reported to the Agency by March 1 of the following year for wastes treated and left on-site or shipped off-site for storage, treatment and/or disposal during any calendar year. Additional information and appropriate report forms may be obtained from the Agency by contacting:

Facility Reporting Unit  
Division of Land Pollution Control  
Illinois Environmental Protection Agency  
P.O. Box 19276  
Springfield, Illinois 62794-9276

Should you have any questions regarding this matter, please contact Hernando Albarracin at 217/524-3264.

Very truly yours,

  
Lawrence W. Eastep, P.E., Manager  
Permit Section  
Division of Land Pollution Control  
Bureau of Land

<sup>HAA</sup>  
LWE:HAA:lat/sp/756Z,1-7

<sup>JK</sup>  
Attachments

cc: Ted Slavic -- IT Corporation  
USEPA Region V -- George Hamper

ATTACHMENT

This statement is to be completed by both the responsible officer and by the registered professional engineer upon completion of closure. Submit one copy of the certification with original signatures and three additional copies.

Closure Certification Statement

Closure Log C-611-M-1

The hazardous waste management S03 unit at the facility described in this document has been closed in accordance with the specifications in the approved closure plan. I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

\_\_\_\_\_  
USEPA ID Number

\_\_\_\_\_  
Facility Name

\_\_\_\_\_  
Signature of Owner/Operator      Date

\_\_\_\_\_  
Name and Title

\_\_\_\_\_  
Signature of Registered P.E.      Date

\_\_\_\_\_  
Name of Registered P.E. and Illinois  
Registration Number

Mailing Address of P.E.:  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

LWE:HAA:1at/sp/756Z,8



## ATTACHMENT A

### GUIDANCE FOR ESTABLISHING THE BASIS FOR CLEANUP OBJECTIVES

The Illinois Pollution Control Board finalized regulations establishing groundwater quality standards for the State of Illinois (see 35 IAC 620) in November 1991. As such, the Agency must ensure that the soil cleanup objectives which have been or will be established for each facility will not cause any future violations of these standards. In general, the Agency will establish soil and groundwater cleanup objectives which it feels are necessary to protect the quality of Class I groundwater (the most stringent standards), unless site-specific information is provided which would indicate otherwise. Therefore, if a facility desires to have less stringent cleanup objectives than those based upon the protection of Class I groundwater, a report must be developed and submitted to the Agency which (1) assesses the geology and hydrogeology of this site and (2) indicates no groundwater subject to the Class I standards will be impacted by the residual contamination in the soil. Such a determination will result in the Agency establishing cleanup objectives based upon the protection of Class II groundwater. This report should utilize, as available, existing information and contain:

1. A detailed description of the geologic and hydrogeologic characteristics of the area in which the site is located. Specifically, the geography, geology, lithology, stratigraphy and hydrogeology of the area within a 1 to 2 mile radius of the site based upon existing information must be described. In addition, the presence and location of any "Class I aquifers" (as generally defined in 35 IAC 620) must be identified and discussed. Existing information which should be relied upon includes, but is not limited to, information from the Illinois Scientific Surveys, the Agency, other State and Federal organizations, water well investigation logs and previous investigations (including subsurface investigations for building foundations). References should be provided in the report for all sources of information utilized in the report.
2. The results of a site specific investigation which included, at a minimum, one boring made near the area undergoing closure which was (1) drilled in accordance with ASTM Method D-420 and (2) sampled continuously using either a split spoon sampler (ASTM Method D-1586) or a Shelby tube sampler (ASTM Method D-1587). In addition, all soil encountered must be field classified in accordance with ASTM Method D-2488. Furthermore, appropriate testing must be conducted, as necessary, to demonstrate that the water-bearing units encountered do not possess any of the characteristics identified in 35 IAC 620.210(a)(4). This boring must extend from the ground surface to a depth which is 15 feet into the uppermost water-bearing unit subject to Class I standards OR bedrock, whichever is shallower. The information related to this investigation contained in the report must include:
  - a. A discussion of the procedures utilized;
  - b. A completed boring log;

GUIDANCE FOR ESTABLISHING THE  
BASIS FOR CLEANUP OBJECTIVES  
Page 2

- c. The results of all tests conducted during the investigation;
  - d. Identification of all unconsolidated geologic units beneath the site, to bedrock;
  - e. Identification of those geologic units in Item 1.d above which are water-bearing units and an indication of whether the groundwater in these units would be subject to the Class I or Class II standards set forth in 35 IAC 620;
  - f. A discussion of the results, including a conclusion related to the presence or absence beneath the site of groundwater subject to the Class I standards.
3. An identification of any private water supply wells within a one mile radius of the site. A scaled drawing showing the location of these wells must be provided along with actual logs and documentation of the efforts made to obtain this information;
  4. An identification of any public water supply wells within a two mile radius of the site. A scaled drawing showing the location of these wells must be provided along with actual logs and documentation of the efforts made to obtain this information;
  5. An identification of the geologic units beneath the site which are used for private water supply within a one mile radius of the site (including bedrock units) and an indication of whether these units contain groundwater subject to the Class I Standards;
  6. An identification of the geologic units beneath the site which are used as a public water supply (including bedrock units) and an indication of whether these units contain groundwater subject to the Class I standards;
  7. A discussion of the impact the residual soil contamination at the site will have on any groundwater beneath the site which is subject to the Class I standards.

The Illinois State Water Survey and the Illinois State Geological Survey should be contacted, as well as other appropriate state and federal entities, to obtain existing information related to the hydrogeology of the area. The report must contain adequate documentation that information from the surveys was used in developing this hydrogeologic assessment.

A certification meeting the requirements of 35 IAC 702.126 must accompany this report. In addition, an independent Illinois registered professional engineer must also certify the information in the report.



File

217/524-3300

ATTACHMENT I

May 29, 1992

Thomas D. Gentner, P.E.  
Morton International, Inc.  
100 North Riverside Plaza  
Chicago, Illinois 60606-1596

Re: 0890100007 -- Kane County  
Morton International  
ILD095309647  
Log No. C-611  
Received: March 31, 1992  
RCRA-Closure

Dear Mr. Gentner:

The closure plan submitted by you and prepared by IT Corporation has been reviewed by this Agency. Your final closure plan to close the hazardous waste waste pile (S03) storage area is hereby approved subject to the following conditions and modifications.

1. Closure activities must be completed by December 1, 1992. When closure is complete the owner or operator must submit to the Agency certification both by the owner or operator and by an independent registered professional engineer that the facility has been closed in accordance with the specifications in the approved closure plan. This certification must be received at this Agency within sixty (60) days after closure, or by February 1, 1993. These dates may be revised pending review of the submittal required by Condition 9 below.

The attached closure certification form must be used. Signatures must meet the requirements of 35 Ill. Adm. Code Section 702.126. The independent engineer should be present at all critical, major points (activities) during the closure. These might include soil sampling, soil removal, backfilling, final cover placement, etc. The frequency of inspections by the independent engineer must be sufficient to determine the adequacy of each critical activity. Financial assurance must be maintained for the units approved for closure herein until the Agency approves the facility's closure certification.

The Illinois Professional Engineering Act (Ill. Rev. Stat., Ch. 111, par. 5101 et. seq.) requires that any person who practices professional engineering in the State of Illinois or implies that he (she) is a professional engineer must be registered under the Illinois Professional Engineering Act (par. 5101, Sec. 1). Therefore, any certification or engineering services which are performed for a closure plan in the State of Illinois must be done by an Illinois P.E.

Plans and specifications, designs, drawings, reports, and other documents rendered as professional engineering services, and revisions of the above must be sealed and signed by a professional engineer in accordance with par. 5119, sec. 13.1 of the Illinois Professional Engineering Act.



Page 2

As part of the closure certification, to document the closure activities at your facility, please submit a Closure Documentation Report which includes:

- a. The volume of waste and waste residue removed. The term waste includes wastes resulting from decontamination activities.
- b. A description of the method of waste handling and transport.
- c. The waste manifest numbers.
- d. Copies of the waste manifests.
- e. A description of the sampling and analytical methods used, including sample preservation methods and chain-of-custody information.
- f. A chronological summary of closure activities and the cost involved.
- g. Color photo documentation of closure. Document conditions before, during and after closure.
- h. Tests performed, methods and results.

The original and two (2) copies of all certifications, logs, or reports which are required to be submitted to the Agency by the facility should be mailed to the following address:

Illinois Environmental Protection Agency  
Division of Land Pollution Control -- #33  
Permit Section  
2200 Churchill Road  
Post Office Box 19276  
Springfield, Illinois 62794-9276

2. If the Agency determines that implementation of this closure plan fails to satisfy the requirements of 35 Ill. Adm. Code, Section 725.211, the Agency reserves the right to amend the closure plan. Revisions of closure plans are subject to the appeal provisions of Section 40 of the Illinois Environmental Protection Act.
3. After reviewing Appendix D of the closure plan, several soil samples collected from the former hazardous waste tank accumulation area appear to indicate that contamination containing hazardous waste constituents remains in the soil. Pursuant to 35 IAC 722.134(a)(1), a generator who accumulates hazardous waste in tanks must comply with 35 IAC 725.211 and 725.214. Based upon the analytical results provided, Morton International has not complied with these standards. As a result, Morton International should contact the Agency's Remedial Project Management Section (RPMS) at 217/782-6760 to determine the next course of action in this area.



4. If contamination is detected, the Agency must be notified in writing within fifteen (15) days. A revised closure plan addressing remediation of the contamination detected must be submitted within timeframes established by the Agency.
5. A request for release of financial assurance documents should be included with the closure certification documents.
6. Under the provisions of 29 CFR 1910 (51 FR 15,654, December 19, 1986), cleanup operations must meet the applicable requirements of OSHA's Hazardous Waste Operations and Emergency Response standard. These requirements include hazard communication, medical surveillance, health and safety programs, air monitoring, decontamination and training. General site workers engaged in activities that expose or potentially expose them to hazardous substances must receive a minimum of 40 hours of safety and health training off site plus a minimum of three days of actual field experience under the direct supervision of a trained experienced supervisor. Managers and supervisors at the cleanup site must have at least an additional eight hours of specialized training on managing hazardous waste operations.
7. All samples shall be analyzed individually (i.e., no compositing). All soil samples shall be collected at intervals of 0 to 6 inches and 12 to 18 inches below the land surface. Sampling and analytical procedures shall be conducted in accordance with Test Methods for Evaluating Solid Wastes, Third Edition (SW-846), and Attachment 7 to this Agency's closure plan instruction package. Specifically, soil samples shall be analyzed per Method 8240 of SW-846 (Third Edition). They shall also be analyzed for the following heavy metals using SW-846 (Third Edition) test methods: arsenic, barium, cadmium, chromium, lead, mercury, nickel, selenium, and silver. Please note that the Agency will establish cleanup objectives for heavy metals based upon TCLP concentrations. When a SW-846 (Third Edition) analytical method is specified, all the chemicals listed in the Quantitation Limits Table for that method shall be reported unless specifically exempted in writing by the Agency. When visually discolored or contaminated material exists within an area to be sampled, horizontal placement of sampling locations shall be adjusted to include such visually discolored and/or contaminated areas. Sample size per interval shall be minimized to prevent dilution of any contamination. Apparent visually contaminated material within a sampling interval shall be included in the sample portion of the interval to be analyzed. To demonstrate a parameter is not present in a sample, analysis results must show a detection limit at least as low as the PQL for that parameter in the Third Edition of SW-846. For inorganic parameters, the detection limit must be at least as low as the RCRA Groundwater Detection Limits, as referenced in SW-846 (Third Edition) Volume 1A, pages TWO-29 and TWO-30, Table 2-15. If possible, your sampling program should be extensive enough to determine the lateral and vertical extent of contamination to the detection limit (PQLs) referenced above.



8. As stated in Section 1.2.1 of the closure plan (page 9), surface drainage around the waste pile area is towards the stormwater retention pond, i.e., to the southwest. Therefore, additional soil sampling to determine the rate and extent (horizontal and vertical) of contamination shall be done if the soil samples indicate levels of contamination greater than the Agency established cleanup objectives.
9. The Agency will establish cleanup objectives to be used to determine if "clean" closure (closure by removal) has been achieved upon receipt and review of the sampling and analytical results required in Condition 7 above. These sampling and analytical results along with a proposal for site specific cleanup objectives (if you wish to propose them) must be submitted to this Agency by September 1, 1992. A report documenting the results of the required sampling/analysis results must be submitted to the Agency by September 1, 1992. This report must include:
  - a. A summary of the results;
  - b. An accurate scaled drawing showing the location where all samples were collected, relative to the regulated unit;
  - c. The depth and interval where samples were collected;
  - d. A description of the soil sampling procedures and sample preservation/chain of custody methods;
  - e. The test methods used and detection limits achieved;
  - f. Actual laboratory reports (copies);
  - g. A discussion of the results;
  - h. Visual classification of all soil samples in accordance with ASTM Method D 2488;
  - i. Colored photographs of the areas from which each sample was collected.
10. If clean closure cannot be achieved pursuant to 35 IAC 725.358(a), then a modified closure plan and a post-closure plan prepared pursuant to 35 IAC Section 725.358(b) must be submitted to the Agency for review and approval within 60 days of such a determination.
11. 35 IAC 721.131 F001 through F005 wastes must be disposed in accordance with 35 IAC Part 728.
12. To avoid creating another regulated storage unit during closure, it is recommended that you obtain any necessary permits for waste disposal prior to initiating excavation activities. If it is necessary to store excavated hazardous waste on-site prior to off-site disposal, do so only in containers or tanks for less than ninety (90) days. Do not create regulated waste pile units by storing the excavated hazardous waste in piles. The ninety (90) day accumulation time exemption (35 IAC 722.134) only applies to containers and tanks.



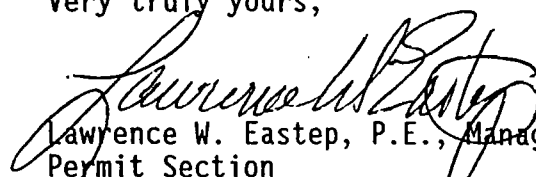
Page 5

13. Please be advised that the requirements of the Responsible Property Transfer Act (Public Act 85-1228) may apply to your facility due to the management of RCRA hazardous waste. In addition, please be advised that if you store or treat on-site generated hazardous waste in containers or tanks pursuant to 35 IAC 722.134, those units are subject to the closure requirements identified in 35 IAC 722.134(a)(1).
14. All hazardous wastes that result from this project are subject to annual reporting as required in 35 IAC 722.141 and shall be reported to the Agency by March 1 of the following year for wastes treated and left on-site or shipped off-site for storage, treatment and/or disposal during any calendar year. Additional information and appropriate report forms may be obtained from the Agency by contacting:

Facility Reporting Unit  
Division of Land Pollution Control  
Illinois Environmental Protection Agency  
P.O. Box 19276  
Springfield, Illinois 62794-9276

Should you have any questions regarding this matter, please contact Hernando Albarracin at 217/524-3300.

Very truly yours,

  
Lawrence W. Eastep, P.E., Manager  
Permit Section  
Division of Land Pollution Control  
Bureau of Land

<sup>AJD</sup>  
LWE:HAA:sf/84Z,17-21  
<sub>JKM</sub>

Attachment

cc: Raymond R. Boyd, P.E., IT Corporation  
USEPA Region V -- George Hamper

bcc: Division File  
Maywood Region  
RPMS  
Kenn Liss  
Jim Moore  
Hernando Albarracin  
Amy Dragovich



ATTACHMENT

This statement is to be completed by both the responsible officer and by the registered professional engineer upon completion of closure. Submit one copy of the certification with original signatures and three additional copies.

Closure Certification Statement

Closure Log C-611

The hazardous waste management S03 unit at the facility described in this document has been closed in accordance with the specifications in the approved closure plan. I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

\_\_\_\_\_  
USEPA ID Number

\_\_\_\_\_  
Facility Name

\_\_\_\_\_  
Signature of Owner/Operator

\_\_\_\_\_  
Name and Title

\_\_\_\_\_  
Signature of Registered P.E.

\_\_\_\_\_  
Name of Registered P.E. and  
Illinois Registration Number

\_\_\_\_\_  
Date

HAA:sf/84Z,22



CLOSURE LOG # : 111  
 FACILITY : RUTHERFORD Integrated Inc.  
 STAGE ID # : 12-01-00007  
 REG ID # : 10005307847  
 STATUS :  
 TYPE : F  
 NOTIFY AGENS : Y  
 CLOSURE : 04/00/00  
 CLOSURE : 1000  
 DeviceID : 0000  
 NOTIFY AGENS : Y  
 NOTIFY ORS : Y  
 Date : 91/12/01  
 UNF :  
 1st-RECD : 91/12/00  
 2nd-RECD : 92/03/01  
 1-PAILED : 92/02/28  
 2-PAILED : 92/03/29  
 APP OR REG : APP  
 2nd-RECD :  
 2nd-RECD : 92/03/31  
 2nd-RECD : 92/03/00  
 2nd-PAILED : 92/03/29

CERTIFICATION DUE : 93/02/01  
 CLOSED :  
 UNITS CLOSED : 503  
 UNITS REMAIN : NONE  
 3 OR 1 STATUS:  
 COMMENTS :  
 CERTIFICATION RECD :  
 CLEAN CLOSURE : Y  
 LIL SENT :  
 RECD SENT :

CONTAM SOIL-Y/N/? : ? ABOVE PGL-Y/N/? : ABOVE CUU-Y/N/? :  
 CONTAM-VOL/SVOL/N/? :  
 CONTAM GW-Y/N/? : Y ABOVE PGL-Y/N/? : Y ABOVE CUU-Y/N/? : ?  
 CONTAM-VOL/SVOL/N/? : VOL

REMEDIATION-PROG/IN PROG/COMPLETE/AGENCY NAME VOLUME UNIT-#/C/L#

SOIL VENT-Y/N#	AERATION-Y/N/ON/OFF	WATERILL-Any-NO/YES/Cell
CAP IN PLACE-Y/N#	WICKED-Y/N#	INCIDENT-Any-ON/OFF
REFILL-Y/N/ON/OFF	TREATMENT-Y/N/ON/OFF	ADDF & TREAT-Any-ON/OFF
PROCESS 1: 503	AMOUNT 1: 1.0	UNIT 1: 01
PROCESS 2:	AMOUNT 2:	UNIT 2:
PROCESS 3:	AMOUNT 3:	UNIT 3:
PROCESS 4:	AMOUNT 4:	UNIT 4:
PROCESS 5:	AMOUNT 5:	UNIT 5:
PROCESS 6:	AMOUNT 6:	UNIT 6:

- 1) COMPLETE CLOSURE CHECKLIST
  - 2) CALL FOS & MAKE SURE THESE ARE CORRECT AREAS TO CLOSE
  - 3) STORAGE AREA INTEGRITY (CRACKS, GAPS, JOINTS, CURBS, ETC.)
  - 4) STORAGE AREA RUNOFF/DRAINAGE
  - 5) SAMPLING PARAMETERS W.R.T. WASTES MANAGED
  - 6) SAMPLING METHODS AND LOCATIONS AND DEPTHS
  - 7) ANALYTICAL METHODS (SW-846)
  - 8) REVIEW NOTES
    - a. Intro to Project -- Site name, location, brief description of submittal
    - b. Pertinent Site History
    - c. Summary/Review/Evaluation of Submittal
    - d. Identification of Final Action to be Taken
    - e. Discussion of Final Action, including Discussion of Final Letter
- COMPUTER BLANKS

- REVIEW NOTES (6 pages)
- CLOSURE PLAN REVIEW NOTES  
AND CHECKLIST (13 pages)
- Comments from FOS-Maywood (1 page)
- Compliance Unit Evaluation (3 pages)

STATE OF ILLINOIS  
ENVIRONMENTAL PROTECTION AGENCY

(0890100007--)  
Kane

RCRA  
Closure  
C-611

IL 532-0357  
ADM 39  
054-002

1 of 6

Subject MORTON INTERNATIONAL

Data Review Notes

Reviewed by HAA

Date May 18, 1992

\* Review of revised closure plan dated March 1992 and revised by IEPA on March 31, 1992.

1. Facility manufactures organic coatings from organic solvents and resins. Facility location is Kane County, T. 38 N., R. 8 E., Section 13.

2. Facility generates ~ 5000 gal./month of F003 + F005 HW.

3. Facility has the following on-site:

- a. Two 6000-gal. aboveground tanks
- b. Four 10,000-gal. " "
- c. One 5000-gal. " "
- d. Five 5800-gal. " "

(a), (b) + (d) are used to store organic resins + have dry containment  
(c) used to store HW.

Also,

- e. Seven 10,000-gal. USTs
- f. Seven 5000-gal. "
- g. One 10,000-gal. "
- h. One 10,000-gal. "

(e) and (f) used to store organic solvents + plasticizers.

(g) used to collect spills

(h) used to store heating oil (inactive)

4. Facility removed + resealed tank (c) above. Contaminated soil was removed from the resulting excavation and stockpiled on-site. The soil is contaminated w/ VOCs.

STATE OF ILLINOIS  
ENVIRONMENTAL PROTECTION AGENCY

(0891010007 --)  
Kane

PCRA  
closure  
C-611

IL 532-0357  
ADM 39  
054-002

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Subject MORTON INTERNATIONAL  
Data Review Notes  
Reviewed by HAA

Date May 18, 1992

- 5 Facility created a HW unit (waste pile), which must undergo RCRA closure.

Since this closure plan is a resubmittal, next I will list the deficiencies listed in the Agency's 2-26-92 letter, which disapproved the original CP.

1. HW Tank Storage Area

Morton did not <sup>adequately</sup> address this deficiency. Appendix A of the CP contains analytical results of soil sampling conducted during relocation of the 5000-gal. tank. Reported detection limits are above PQLs, so can't tell if former tank storage area is "clean". Also, water accumulated in the excavation. One grab water sample taken from boring SB-5 showed contamination. The facility states that after pumping H<sub>2</sub>O, no additional H<sub>2</sub>O was encountered in excavation. The geology of this area is reported as hard clay w/ sand & gravel from 0' to 1.5-2' below surface. Then, brown & gray clay w/ traces of silt, sand & gravel. Hand-augered borings indicated the presence of H<sub>2</sub>O at 2-2.5' to > 4.5'.

Page 8 of CP states that wells installed in 1989 indicate depth to H<sub>2</sub>O at 11 to 50 feet. No borings were provided.

Boring <sup>logs</sup> were provided for borings drilled during relocation of tank. However, the logs are very sketchy & inadequate.

I still think this area needs to be addressed.

2. Detailed Drawing of the Unit(s)

Map provided. Adequate. (See Figure 7.)

STATE OF ILLINOIS  
ENVIRONMENTAL PROTECTION AGENCY

RCRA  
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Subject MORTON INTERNATIONAL (0890100007-- Kane)  
Data Review Notes  
Reviewed by HAA

Date May 18, 1992

3. Storage Area Pavement/Surface Description

Provided in Section 1.2.1 of the revised CP.

4. List of HW.

Facility states that spent solvent waste may also contain paint residues. Therefore, facility proposes to sample soil in waste pile for the following metals:

- |                          |                        |
|--------------------------|------------------------|
| (7080, 7081) a. Barium   | e. Nickel (7520)       |
| (7130, 7131) b. Cadmium  | f. Mercury             |
| (7190, 7191) c. Chromium | g. Silver (7760, 7761) |
| (7420, 7421) d. Lead     | h. Arsenic             |
|                          | i. Selenium            |

Facility proposes to use Method 6010 of SW-846 to analyze for barium, cadmium, chromium, lead, nickel, + silver. In addition, soil samples will be analyzed for mercury (Method 7470), arsenic (Method 7060), and selenium (Method 7740).

Numbers in red above indicate <sup>other</sup> SW-846 <sup>test</sup> methods that could <sup>also</sup> be used. Those constituents which have 2 test methods beside them → 2nd test method has a lower PQL.

NEED  
TO  
ADDRESS  
IN  
RESPONSE

Facility proposes to analyze <sup>all soil samples</sup> for total metals. Then, the three samples w/ the highest total concentration will be analyzed using TCLP, Method 1311.

5. Facility does not plan to collect background samples.

Subject MORTON INTERNATIONAL (0890100007--)  
Kane

Data Review Notes

Reviewed by HAA

Date May 18, 1992

6. Facility did not address this issue very well. Ken Lovett  
\* will provide comments on this issue.

7. Schedule for Closure.

Provided. See Table 6 in CP. Adequate.

8. Cert. Regarding Potential Releases from SWMUs.

Provided. See Appendix E in CP.

9. Signatory Requirements.

Provided. See pages 19 + 20 of CP.

\* Pursuant to 35 IAC 725.212(d)(4), the Agency will approve  
the CP w/ modifications.

Need conditions to

- Address soil sampling methodology
- Address soil sampling depth increments/intervals → facility  
proposed 6" to 18". Need another interval?

\* Additional comments w/ regard to deficiency #1 above (see page 2 of  
review notes). Review of analytical data provided in Appendix D,  
which contains soil sampling results from the 2nd + 3rd rounds  
of soil sampling, indicates that adequate PQIs were used,  
as compared to the first round of sampling. Also, not all soil  
samples are "clean" when compared to Agency's Class I cleanup  
objectives for the constituents in question. That is, samples  
SS-04A + SS-05A contain chloroform above Class I objectives;  
sample SS-06A contains benzene above Class I objectives; sample SS-17A  
contains 1,2-Dichloroethane above Class I CUO; and samples SS-01E,

STATE OF ILLINOIS  
ENVIRONMENTAL PROTECTION AGENCY

RCRA  
closure  
C-611

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Subject MORTON INTERNATIONAL (0890100007-- Kane)  
Data Review Notes  
Reviewed by HAA

Date May 18, 1992

SS-02B and SS-03B contain methylene chloride above Class I CUO. Methylene chloride was not detected during the first or second round of soil sampling. See attached table for more info.

- \* As stated above, the <sup>revised</sup> closure plan will be approved. As far as the former HW accumulation tank is concerned, the Permit Section will advise Morton of the fact that some contamination remains in the soil and that Morton should contact RIMS to determine what the next step is in this area. The reason for this is Morton has not complied w/ 35 IAC 725.211 + 725.214. These standards must be complied w/ and are applicable to generators who ~~are~~ ~~are~~ operate pursuant to 35 IAC 722.134. (See condition 3 of the Agency's response.)

Other conditions are | deal w/

1. Soil sampling underneath <sup>and around</sup> the waste pile. Two intervals 0'-6" and 12"-18". All samples to be analyzed per 8240 + 9 heavy metals (see page 3 of review notes). (See condition 7 of response.)
2. Migration of contaminants via runoff from waste pile. This has to do w/ rate + extent. (See condition 8 of response.)
3. Submission of analytical results. See condition 9 of response.
4. Other standard conditions.

6 of 6

\* Green Numbers: Class II CUOs

\* Red Numbers: Class I CUOs





DATE: APRIL 07, 1992

TO: All DLPC Staff

FROM: Bob Mathis

SUBJECT: MICROFILMING OF DIVISION FILES

The File Room is about to begin microfilming files for the facilities or counties listed below. We need all the information on the sites we are filming combined to make sure the file is complete before it is actually filmed. Please send any information you may have at your desk to the file room to be incorporated with these files by

APRIL 21, 1992

Please send us any information you have on the following files:

MASON COUNTY

MENARD COUNTY

MONTGOMERY COUNTY

MORGAN COUNTY

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

BM:tk:1/9/48(4/6/90)



Will a change in the Part A be necessary if the closure is approved? No

Is the facility requesting additional time to start or complete closure than allowed? No Explain: \_\_\_\_\_

Size or area of each unit closing: Waste pile measures ~ 125' long, 20' to 28' wide.

Identify wastes managed in each unit (include hazardous waste codes):

Spent solvent → F003, F005

↓

↳ MEK, toluene

Xylene

Volume of wastes disposed of, or located in, units at the facility: \_\_\_\_\_

Waste pile = 131 cubic yards.

Sampling grid spacing 14 ft. Satisfactory? YES

Total number of samples from unit = 29

Were background samples taken from proper soil horizon? N/A

Total number of background samples (minimum of 10 per strata) = N/A

Submitted to COT on N/A at this time (date)

Recommendations from COT dated N/A at this time

Reviewed by CROPA on N/A at this time (date)

CROPA memo dated N/A at this time

Identify soil and/or groundwater clean-up levels. (Give basis, i.e., closure plan, COT/CROPA recommendation, PQL, etc.)

To be established by Agency later.

Is the portion of the sample to be tested appropriate? \_\_\_\_\_

Approximate volume of waste to be removed: 131 CY  
(yds. or gallons)

Approximate volume of underlying and surrounding soil and liner to be removed:

Unknown at this time.

How is site to be capped or otherwise restored? Remove contaminated soil.

Are there any non-RCRA Solid Waste Management Units? YES Explain: \_\_\_\_\_

Twelve aboveground storage tanks, sixteen underground storage tanks, container storage area, and waste recycling operations.

Have there been any releases from the SWMUs? YES.

Explain: Release from one aboveground storage tank and several underground storage tank remote fill lines.

How is the groundwater to be addressed for the closing unit? N/A at this time.

Is groundwater monitored? Yes

Is groundwater contaminated? No (at this time)

What is the facility's Subpart F compliance status? N/A at this time

If the facility is in assessment, will the assessment be completed prior to final closure? N/A

Is additional groundwater monitoring warranted in closure plan? No

Explain: \_\_\_\_\_

Is groundwater monitoring warranted after closure? \_\_\_\_\_ Explain: \_\_\_\_\_

Unknown at this time.

Is the facility being referred to USEPA for corrective action? No

If so, indicate the type of enforcement: 3013 Order \_\_\_\_\_

3008(h) Order \_\_\_\_\_

3005(c) Action \_\_\_\_\_

Final Action: Approve ☒, Disapprove \_\_\_\_\_, Modify ☒

Schedule for closure: Date of Plan Approval: \_\_\_\_\_

Start closure: \_\_\_\_\_

Complete closure: \_\_\_\_\_

Certification due to IEPA: \_\_\_\_\_

## SECTION B: CLOSURE PLAN CHECKLIST

LEGEND

PR: Provided

AD: Adequate

NA: Not Applicable

Note: Respond to questions with  
Y for yes and N for no

## 1. Description of hazardous waste operation and proposed closure (725.212(a) and (b))

PR AD NA

<u>Y</u>	<u>Y</u>	—	a.	description provided of hazardous waste operations
<u>Y</u>	<u>Y</u>	—	b.	description provided for all hazardous waste units at the facility
<u>Y</u>	<u>Y</u>	—	c.	identification of units closing
<u>Y</u>	<u>Y</u>	—	d.	identification of units remaining open
<u>Y</u>	<u>Y</u>	—	e.	maximum inventory of wastes at any time during life of facility (should correspond to Part A volumes)
<u>Y</u>	<u>Y</u>	—	f.	description of steps to be taken for decontamination of facility equipment (725.212(b)(4))
—	—	<u>X</u>	g.	expected year of closure for all units at the facility (725.212(b)(1))
<u>Y</u>	—	—	h.	schedule of closure for all units (725.212(b)(6) and (b)(7))
—	—	<u>X</u>	i.	plan submitted 180 days prior to initiation of closure (725.212(d)(1))
<u>Y</u>	<u>Y</u>	—	j.	all hazardous wastes and hazardous constituents properly identified
<u>Y</u>	<u>Y</u>	—	k.	groundwater/surface water use in the area identified

## 2. Public Involvement (725.212(d)(4))

—	—	<u>X</u>	a.	newspaper notice posted
—	—	<u>↓</u>	b.	public hearing requested?
—	—	<u>↓</u>	c.	public hearing granted?
—	—	<u>↓</u>	d.	notice of public hearing 30 days prior to hearing

## 3. Closure time limits (725.213)

<u>Y</u>	—	—	a.	90-day limit for treatment, removal or disposal of hazardous wastes
<u>Y</u>	—	—	b.	180-day limit for completion of closure activities
—	—	<u>X</u>	c.	extension of time limits
—	—	<u>X</u>	d.	justification provided for extension of time limits?

## 4. Disposal or decontamination of equipment (725.214)

PR AD NA

- |          |          |          |    |  |
|----------|----------|----------|----|--|
| <u>Y</u> | <u>Y</u> | <u>—</u> | a. | proper disposal of facility equipment and structures, or             |
| <u>Y</u> | <u>Y</u> | <u>—</u> | b. | decontamination - removal of all hazardous wastes and residues       |
| <u>Y</u> | <u>Y</u> | <u>—</u> | c. | decontamination of equipment used for cleanup                        |
| <u>Y</u> | <u>Y</u> | <u>—</u> | d. | decontamination method   |
| <u>Y</u> | <u>Y</u> | <u>—</u> | e. | RC wastes and residues to be handled and disposed as hazardous waste |

## 5. Certification of closure (725.215, 725.216 and 725.219)

Response  
from IEPA  
will state  
these

- |          |          |          |    |   |
|----------|----------|----------|----|---|
| <u>Y</u> | <u>Y</u> | <u>—</u> | a. | provision for certification by owner or operator within 60 days following closure   |
| <u>Y</u> | <u>Y</u> | <u>—</u> | b. | provision for certification by independent registered Professional Engineer that facility was closed in accordance with the approved closure plan |
| <u>Y</u> | <u>Y</u> | <u>—</u> | c. | provision for Closure Documentation Report to document closure activities   |
| <u>—</u> | <u>—</u> | <u>X</u> | d. | survey plat and notification in deed to Agency and appropriate local government office  |
| <u>—</u> | <u>—</u> | <u>X</u> | e. | certification to Agency that notification in deed has been made (725.219(b)(2))   |

## 6. Post-Closure Care Plan required? (725.217)

- |          |          |          |  |
|----------|----------|----------|--|
| <u>—</u> | <u>—</u> | <u>X</u> | Disposal units closing after 1/26/83 are required to obtain a Post-Closure Permit.<br>Advise facility that a PCC Plan will be called in at a later date. |
|----------|----------|----------|--|

7. Closure of container storage area (S01).

- |          |          |          |    |  |
|----------|----------|----------|----|--|
| <u>—</u> | <u>—</u> | <u>X</u> | a. | soil sampling plan   |
| <u>—</u> | <u>—</u> | <u>+</u> |    | grid spacing   |
| <u>—</u> | <u>—</u> | <u>+</u> |    | adjacent areas to be sampled for spills and/or windblown particulates                      |
| <u>—</u> | <u>—</u> | <u>+</u> | b. | soil analysis plan   |
| <u>—</u> | <u>—</u> | <u>+</u> |    | includes all hazardous constituents  |
| <u>—</u> | <u>—</u> | <u>+</u> |    | detection limits   |
| <u>—</u> | <u>—</u> | <u>+</u> |    | sampling increments and total depth of sampling  |
| <u>—</u> | <u>—</u> | <u>+</u> |    | sample handling and analysis (40 CFR 261, App. III; SW-846; Attachment 7 of this document) |
| <u>—</u> | <u>—</u> | <u>+</u> | c. | removal of contaminated soil   |
| <u>—</u> | <u>—</u> | <u>+</u> | d. | cleanup standard   |
| <u>—</u> | <u>—</u> | <u>+</u> | e. | post-closure care in lieu of clean closure   |
| <u>—</u> | <u>—</u> | <u>+</u> | f. | decontamination of facility  |
| <u>—</u> | <u>—</u> | <u>+</u> | g. | decontamination of equipment   |
| <u>—</u> | <u>—</u> | <u>+</u> | h. | disposal of cleaning waste and residue   |

PR AD NA

- |   |   |   |    |   |
|---|---|---|----|---|
| — | — | x | i. | scale drawing of storage area   |
| — | — |   | j. | surface description (asphalt, concrete, aggregate, soil)                                  |
| — | — | ↓ | k. | structural integrity and containment devices (cracks, joints, deterioration, curbs, roof) |

8. Closure of tank storage or treatment units (S02, T01 -- 725.297)

- |   |   |   |    |   |
|---|---|---|----|---|
| — | — | x | a. | scale drawing of storage area, including secondary containment structures, sumps and drainage pathways                                  |
| — | — |   | b. | description of materials used to construct tanks, ancillary equipment and secondary containment structures                              |
| — | — |   | c. | present condition of tanks, ancillary equipment and secondary containment structures (i.e., structural integrity and surface condition) |
| — | — |   | d. | removal of all hazardous wastes and residues from:  |
| — | — |   |    | tanks   |
| — | — |   |    | pipes and discharge control equipment   |
| — | — |   |    | discharge confinement structures  |
| — | — |   | e. | decontamination of equipment  |
| — | — |   | f. | soil testing beneath and around tank, including secondary containment areas, to verify that no spills or leaks have occurred            |
| — | — |   |    | includes all hazardous constituents   |
| — | — |   |    | detection limits  |
| — | — |   |    | sampling increments and total depth of sampling   |
| — | — |   |    | sample handling and analysis (40 CFR 261, App. III; SW-846; Attachment 7 of this document)  |
| — | — |   | g. | cleanup standard  |
| — | — |   | h. | removal of contaminated soil  |
| — | — | ↓ | i. | removal of tank (required by State Fire Marshall for underground tanks which contained flammable materials)                             |

9. Closure and post-closure for surface impoundments (S04, D83, T02 - 725.328)

- |   |   |   |    |   |
|---|---|---|----|---|
| — | — | x | a. | removal of standing liquids   |
| — | — |   | b. | removal of wastes and waste residues  |
| — | — |   | c. | removal of liner  |
| — | — |   | d. | removal of underlying and surrounding contaminated soil   |
| — | — |   | e. | cleanup standard  |
| — | — |   | f. | management of removed material as hazardous waste unless determined to be nonhazardous under 721.103(c)   |
| — | — |   | g. | post-closure care in lieu of material removal (725.328(c)) (40 CFR 265.228(a)(2), March 19, 1987)   |
| — | — |   | h. | dewatering, stabilization or other treatment of remaining wastes to provide cover support and/or render waste nonhazardous (40 CFR 265.228(a)(2), March 19, 1987) |
| — | — | ↓ | i. | request for modification of Part A to include T02 if stabilization or treatment is proposed   |



PR AD NA

- |   |   |   |    |  |
|---|---|---|----|--|
| — | — | X | j. | modification of post-closure requirements due to mitigating factors (725.217(d))           |
| — | — |   | k. | soil sampling plan   |
| — | — |   |    | grid spacing   |
| — | — |   |    | adjacent areas to be sampled for spills and/or windblown particulates                      |
| — | — |   | l. | soil analysis plan   |
| — | — |   |    | includes all hazardous constituents  |
| — | — |   |    | detection limits   |
| — | — |   |    | sample handling and analysis (40 CFR 261, App. III; SW-846; Attachment 7 of this document) |
| — | — | Y | m. | groundwater monitoring provided to verify clean closure (724 or 725, Subpart F)            |

10. Closure and post-closure of waste piles (S03 725.358)

- |   |   |   |    |   |
|---|---|---|----|---|
| Y | Y | — | a. | removal or decontamination of all waste residues  |
| Y | Y | — | b. | removal or decontamination of contaminated:   |
| Y | Y | — |    | liners  |
| Y | Y | — |    | subsoils  |
| Y | Y | — |    | structures and equipment (contaminated with leachate or waste)  |
| Y | Y | — | c. | management of removed materials as hazardous waste unless determined to be nonhazardous according to 721.103(c) & (d) |
| — | — | X | d. | post-closure care provided in accordance with 725.410 if all contaminated subsoils can't be removed or decontaminated |
| Y | Y | — | e. | soil sampling plan  |
| Y | Y | — |    | grid spacing  |
| Y | Y | — |    | adjacent areas to be sampled for spills, tracking and/or windblown particulates                                       |
| Y | Y | — | f. | soil analysis plan  |
| Y | Y | — |    | includes all hazardous constituents   |
| Y | Y | — |    | detection limits  |
| Y | Y | — |    | sampling increments and total depth of sampling   |
| Y | Y | — |    | sample handling and analysis (40 CFR 261, App. III; SW-846; Appendix 7 of this document)                              |

SW-846  
\*

11. Closure and post-closure care objectives for land treatment (D81 725.380(a))

- |   |   |   |    |  |
|---|---|---|----|--|
| — | — | X | a. | control mitigation of hazardous wastes and hazardous waste constituents into the groundwater |
| — | — |   | b. | control release of contaminated run-off into surface water                                   |
| — | — |   | c. | control release of airborne particulate contaminants   |
| — | — | Y | d. | compliance with food chain crop requirements (725.376)                                       |

12. Considerations to be addressed in land treatment closure and post-closure plans (725.380(b))

PR AD NA

- |   |   |          |    |   |
|---|---|----------|----|---|
| — | — | <u>X</u> | a. | type and amount of hazardous wastes and Appendix H hazardous constituents which are contained in the waste  |
| — | — | <u>X</u> | b. | mobility of hazardous wastes and constituents   |
| — | — | <u>X</u> | c. | site location, topography and surrounding land use and the related potential effects of pollutant migration |
| — | — | <u>X</u> | d. | climate (net precipitation)   |
| — | — | <u>X</u> | e. | soil profile and soil properties  |
| — | — | <u>X</u> | f. | geologic profile  |
| — | — | <u>X</u> | g. | surface and subsurface hydrology  |
| — | — | <u>X</u> | h. | unsaturated zone monitoring information (725.378)   |
| — | — | <u>X</u> | i. | type, concentration and depth of hazardous waste migration  |
| — | — | <u>X</u> | j. | removal of contaminated soils   |
| — | — | <u>X</u> | k. | cleanup standards   |
| — | — | <u>X</u> | l. | function of final cover   |
| — | — | <u>X</u> | m. | engineering characteristics of final cover  |
| — | — | <u>X</u> | n. | groundwater monitoring  |

13. Requirements during land treatment closure period (725.380(d))

- |   |   |          |    |  |
|---|---|----------|----|--|
| — | — | <u>X</u> | a. | unsaturated zone monitoring                  |
| — | — | <u>X</u> | b. | maintain run-on control system (725.372(b))  |
| — | — | <u>X</u> | c. | maintain run-off control system (725.372(c)) |
| — | — | <u>X</u> | d. | control wind dispersal of particulates       |

14. Certification by qualified soil scientist in lieu of a registered Professional Engineer for closure of land treatment units (725.380(e))

— — X

15. Closure of incinerators (T03)

- |   |   |          |    |   |
|---|---|----------|----|---|
| — | — | <u>X</u> | a. | removal of all hazardous wastes and hazardous waste residues, including ash, scrubber waters and scrubber sludges |
| — | — | <u>X</u> | b. | management of residues as hazardous wastes unless determined to be nonhazardous according to 721.103(c) & (d)     |

16. Closure of thermal treatment units (725.481)

- |   |   |          |    |  |
|---|---|----------|----|--|
| — | — | <u>X</u> | a. | removal of hazardous waste and hazardous waste residues, including ash                                       |
| — | — | <u>X</u> | b. | management of residues as hazardous waste unless determined to be nonhazardous according to 725.103(c) & (d) |

17. Closure of chemical, physical and biological treatment units (725.504)

- |   |   |          |    |  |
|---|---|----------|----|--|
| — | — | <u>X</u> | a. | removal of all hazardous wastes and hazardous waste residues from treatment process or equipment, discharge control equipment and discharge confinement structures |
|---|---|----------|----|--|

PR AD NA

- — ☒ b. management of residues as a hazardous waste unless determined to be nonhazardous according to 721.103(c) & (d)

ALL DISPOSAL UNITS

18. Objective of closure and post-closure plans (725.410(b))

- — ☒ a. control of pollutant migration from facility via groundwater, surface water and air  
— — ☒ b. control of ponding and surface water infiltration  
— — ☒ c. erosion, run-on and run-off control

19. Considerations for achievement of closure objectives (725.410(c))

- — ☒ a. type and amount of hazardous wastes and Appendix H hazardous constituents which are contained in the waste  
— — ☒ b. mobility and the expected rate of migration of pollutants  
— — ☒ c. site location, topography and surrounding land use and the related potential effects of pollutant migration (proximity to groundwater, surface water and drinking water)  
— — ☒ d. climate, including total amount, net amount, frequency and pH of rainfall  
— — ☒ e. engineering characteristics of cover, including material, final surface contours, thickness, porosity, slope and length of run of slope  
— — ☒ f. geological and soil profiles  
— — ☒ g. surface and subsurface hydrology  
— — ☒ h. soil balance analysis if on-site soils are to be used for cover and vegetative layer

20. Cover design (725.410(a))

- — ☒ a. grain size analysis and grain size requirements  
— — ☒ b. soil classification -- USDA textural and Unified Soil Classification  
— — ☒ c. compaction requirements -- should be 90-95% of ASTM D698 (Standard Proctor) density, compacted at a moisture content 3-5% above optimum moisture content  
— — ☒ d. type of vegetation proposed  
— — ☒ e. hydraulic conductivity  
— — ☒ f. slope stability analysis  
— — ☒ g. synthetic membrane specifications  
— — ☒ h. depth of frost penetration and its effect on the cover system  
— — ☒ i. erosion control  
— — ☒ j. gas collection system  
— — ☒ k. water balance analysis to estimate infiltration  
— — ☒ l. settlement/subsidence effects considered

## 21. Construction procedures for cover (725.410(a))

PR AD NA

- |   |   |   |    |  |
|---|---|---|----|--|
| — | — | X | a. | equipment requirements -- sheepsfoot roller, disk and water truck or other provisions for moisture control |
| — | — |   | b. | lift thickness -- should be 8 inches (loose thickness) or less   |
| — | — |   | c. | construction QA/QC -- number of compaction tests, hydraulic conductivity tests, grain size tests, etc.     |
| — | — | ↓ | d. | hydraulic conductivity testing conducted in accordance with IEPA guidance                                  |

## 22. Notice to local land authority (725.216 and 725.219)

- |   |   |   |    |  |
|---|---|---|----|--|
| — | — | X | a. | survey plat submitted to the Agency and to County Recorder with closure certification  |
| — | — |   | b. | note on plat which states owner's and operator's obligation to restrict disturbance of the site per 725.217(c)   |
| — | — | ↓ | c. | record provided of type, location and quantity of hazardous waste disposed of within each cell or area of the facility, including wastes disposed prior to January 12, 1981 (725.219(a)) |

## 23. Notice in deed to property (725.219)

- |   |   |   |    |   |
|---|---|---|----|---|
| — | — | X | a. | recorded on deed or other instrument which will be examined during a title search that the land has been used to manage hazardous waste |
| — | — | X | b. | copy of this instrument and a certification from the owner/operator that it has been properly recorded                                  |

## 24. Maintenance requirements -- activities and frequencies (725.217(a); 725.218(c); 725.410(d))

- |   |   |   |    |   |
|---|---|---|----|---|
| — | — | X | a. | integrity of final cover or containment structures                                  |
| — | — |   | b. | leachate collection, removal and treatment systems                                  |
| — | — |   | c. | groundwater monitoring system   |
| — | — |   | d. | gas collection and control system (if provided)                                     |
| — | — |   | e. | benchmarks  |
| — | — | ↓ | f. | name, address and phone number for post-closure care contact person (725.218(c)(3)) |

## 25. Security

- |   |   |   |    |  |
|---|---|---|----|--|
| — | — | X | a. | restricted access, if necessary              |
| — | — | X | b. | security provided, if necessary (725.217(b)) |

## 26. Groundwater monitoring (725.217(a)(1); 725.218(a)(1); 725.191 to 725.193)

PR AD NA

- |          |          |          |    |   |
|----------|----------|----------|----|---|
| <u>—</u> | <u>—</u> | <u>X</u> | a. | description of groundwater monitoring system, activities and frequencies for post-closure period (725.191; 725.218(a)(1)) |
| <u>—</u> | <u>—</u> | <u>↓</u> | b. | sampling and analysis plan (725.192)  |
| <u>—</u> | <u>—</u> | <u>↓</u> | c. | outline of groundwater quality assessment program (725.193)   |

## ALL FACILITIES

## 27. Closure performance standard (725.211)

- |          |          |          |    |   |
|----------|----------|----------|----|---|
| <u>Y</u> | <u>—</u> | <u>—</u> | a. | minimizes further maintenance                               |
| <u>Y</u> | <u>—</u> | <u>—</u> | b. | protects human health and environment                       |
| <u>Y</u> | <u>—</u> | <u>—</u> | c. | addresses all hazardous constituents (Part 721, Appendix H) |

## 28. Training requirements for cleanup activities

- |          |          |          |    |  |
|----------|----------|----------|----|--|
| <u>Y</u> | <u>Y</u> | <u>—</u> | a. | provisions made to ensure that site workers will receive training in accordance with 29 CFR, Part 1910 |
|----------|----------|----------|----|--|

## 29. Part A Status

Part A  
withdrawn

- |          |          |          |    |  |
|----------|----------|----------|----|--|
| <u>—</u> | <u>—</u> | <u>X</u> | a. | Part A and HWDMS reviewed  |
| <u>—</u> | <u>—</u> | <u>X</u> | b. | discrepancies between units and design capacities in Part A, HWDMS and closure plan resolved |
| <u>—</u> | <u>—</u> | <u>X</u> | c. | for complete closure -- all units closed or withdrawn  |
| <u>—</u> | <u>—</u> | <u>X</u> | d. | revised Part A or withdrawal request to be submitted with closure certification              |

## 30. SWMU status

- |            |          |           |    |   |
|------------|----------|-----------|----|---|
| <u>—</u>   | <u>—</u> | <u>X</u>  | a. | initial screening completed   |
| <u>—</u>   | <u>—</u> | <u>X</u>  | b. | initial screening previously submitted                                      |
| <u>—</u>   | <u>—</u> | <u>X</u>  | c. | environmentally significant information found during file search            |
| <u>Y</u>   | <u>Y</u> | <u>—</u>  | d. | Certification of Continuing Releases received from facility                 |
| <u>Y</u>   | <u>—</u> | <u>—</u>  | e. | units identified by facility consistent with those found during file search |
| <u>Yes</u> | <u>—</u> | <u>—</u>  | f. | releases indicated on certification   |
| <u>—</u>   | <u>—</u> | <u>No</u> | g. | releases to be cleaned up under closure                                     |
| <u>—</u>   | <u>—</u> | <u>No</u> | h. | releases to be referred to US EPA for action                                |
| <u>—</u>   | <u>—</u> | <u>—</u>  | i. | SWMU's not previously identified discovered during closure?                 |

## RECORD OF TELEPHONE CONVERSATIONS

<u>Date</u>	<u>Person Contacted</u>	<u>Topic of Conversation</u>
-------------	-------------------------	------------------------------

ADDITIONAL COMMENTS

*Due 5/1/92 NBL*

CLOSURE LOG # : 611-M-1  
FACILITY : MORTON INTERNATIONAL  
STATE ID # : 0890100007  
FED ID # : ILD095309647  
STATUS : A  
TYPE :  
NOTIFY RPMS : N

LOCATION : BATAVIA  
COUNTY : KANE  
REVIEWER : HAA  
NOTIFY FOS : Y  
NOTIFY CMS : Y  
FN :  
INSP :

1st-RECD : 92/03/31  
90-DUE : 92/06/29  
1-MAILED :  
APP or REJ :

2nd-SCHED :  
2nd-RECD :  
60-DUE :  
2-MAILED :

CERTIFICATION DUE :  
CLOSED :  
UNITS CLOSED :  
UNITS REMAIN :  
G OR T STATUS :  
COMMENTS :

CERTIFICATION RECD :  
CLEAN CLOSURE :  
CIL SENT :  
PECL SENT :

RECEIVED

MAY 01 1992

IEPA-DLPC

CONTAM SOIL-Y/N/? : ABOVE PQL-Y/N/? : ABOVE CUQ-Y/N/? :  
CONTAM-VO/SVO/M/? :  
CONTAM GW-Y/N/? : ABOVE PQL-Y/N/? : ABOVE CUQ-Y/N/? :  
CONTAM-VO/SVO/M/? :

REMEDATION-PROP/IN PROG/COMPLETE/NA:

VOLUME:

UNIT-T/CY:

SOIL VENT-Y/N : AERATE-Y/N/ON/OFF : STABILIZE-Y/N/ON/OFF :  
CAP IN PLACE-Y/N : BIOREM-Y/N : INCIN-Y/N/ON/OFF :  
LANDFILL-Y/N/ON/OFF : TREATMENT-Y/N/ON/OFF : PUMP & TREAT GW-Y/N :

PROCESS 1:	AMOUNT 1:	UNIT1:	ADD/DEL:
PROCESS 2:	AMOUNT 2:	UNIT2:	ADD/DEL:
PROCESS 3:	AMOUNT 3:	UNIT3:	ADD/DEL:
PROCESS 4:	AMOUNT 4:	UNIT4:	ADD/DEL:
PROCESS 5:	AMOUNT 5:	UNIT5:	ADD/DEL:
PROCESS 6:	AMOUNT 6:	UNIT6:	ADD/DEL:

*No Comments*

*FOS 4-27-92*

- 1) COMPLETE CLOSURE CHECKLIST
- 2) CALL FOS & MAKE SURE THESE ARE CORRECT AREAS TO CLOSE
- 3) STORAGE AREA INTEGRITY (CRACKS, GAPS, JOINTS, CURBS, ETC.)
- 4) STORAGE AREA RUNOFF/DRAINAGE
- 5) SAMPLING PARAMETERS W.R.T. WASTES MANAGED
- 6) SAMPLING METHODS AND LOCATIONS AND DEPTHS
- 7) ANALYTICAL METHODS (SW-846)
- 8) REVIEW NOTES
  - a. Intro to Project -- Site name, location, brief description of submittal
  - b. Pertinent Site History
  - c. Summary/Review/Evaluation of Submittal
  - d. Identification of Final Action to be Taken
  - e. Discussion of Final Action, Including Discussion of Final Letter
- 9) COMPUTER BLANKS

RECEIVED

30 APR 1992

IEPA/DLPC

CLOSURE LOG # : 511 LOCATION : BATAVIA  
FACILITY : MORTON INTERNATIONAL COUNTY : KANE  
STATE ID # : 0890100007 REVIEWER : HAA  
FED ID # : ILD095309647 NOTIFY FOS : Y  
STATUS : ~~NA~~ NOTIFY CMS : Y  
TYPE : F PH : 91/12/17  
NOTIFY RPMS : Y INSP :

1st-RECD : 91/12/03 2nd-SCHED :  
90-DUE : 92/03/03 2nd-RECD : 92/03/31  
1-MAILED : 92/02/26 60-DUE : 92/05/30  
APP or REQ : REQ 2-MAILED :

CERTIFICATION DUE : CERTIFICATION RECD :  
CLOSED : CLEAN CLOSURE : Y  
UNITS CLOSED : 503 CIL SENT :  
UNITS REMAIN : NONE WELL SENT :  
G OR T STATUS:  
COMMENTS :

CONTAM SOIL-Y/N/? : ? ABOVE PBL-Y/N/? : ABOVE CUQ-Y/N/? :  
CONTAM-VO/SVO/M/? :  
CONTAM GW-Y/N/? : Y ABOVE PBL-Y/N/? : Y ABOVE CUQ-Y/N/? : ?  
CONTAM-VO/SVO/M/? : VO

EMEDIATION-PROP/IN PROG/COMPLETE/NA : NA VOLUME : UNIT-T/CY :  
SOIL VENT-Y/N : AERATE-Y/N/ON/OFF : STABILIZE-Y/N/ON/OFF :  
CAP IN PLACE-Y/N : BIOREM-Y/N : INCIN-Y/N/ON/OFF :  
LANDFILL-Y/N/ON/OFF : TREATMENT-Y/N/ON/OFF : PUMP & TREAT GW-Y/N :

PROCESS 1:	503	AMOUNT 1:	131	UNIT1:	C:	ADD/DEL:	DEL
PROCESS 2:		AMOUNT 2:		UNIT2:		ADD/DEL:	
PROCESS 3:		AMOUNT 3:		UNIT3:		ADD/DEL:	
PROCESS 4:		AMOUNT 4:		UNIT4:		ADD/DEL:	
PROCESS 5:		AMOUNT 5:		UNIT5:		ADD/DEL:	
PROCESS 6:		AMOUNT 6:		UNIT6:		ADD/DEL:	

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Due 5/17/92

DW

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 FACILITY : MORTON INTERNATIONAL  
 STATE ID # : 0890100007  
 FED ID # : ILD095309647  
 STATUS : A  
 TYPE :  
 NOTIF: REFS : N

LOCATION : BATAVIA  
 COUNTY : KANE  
 REVIEWER : HHH  
 NOTIFY FOS : Y  
 NOTIFY CRS : Y  
 FH :  
 INSP :

1st-RECD : 92/03/31  
 90-DUE : 92/06/29  
 1-MAILED :  
 APP or REJ :

2nd-SCHED :  
 2nd-RECD :  
 60-DUE :  
 2-MAILED :

CERTIFICATION DUE :  
 CLOSED :  
 UNITS CLOSED :  
 UNITS REMAIN :  
 G OR T STATUS:  
 COMMENTS :

CERTIFICATION RECD :  
 CLEAN CLOSURE :  
 CIL SENT :  
 PECL SENT :

CONTAM SOIL-Y/N/? : ABOVE PQL-Y/N/? : ABOVE CUD-Y/N/? :  
 CONTAM-VG/SVG/N/? :  
 CONTAM GW-Y/N/? : ABOVE PQL-Y/N/? : ABOVE CUD-Y/N/? :  
 CONTAM-VG/SVG/N/? :

REMEDATION-PROP/IN PROG/COMPLETE/NA: VOLUME: UNIT-1/LY:  
 SOIL VENT-Y/N: AERATE-Y/N/ON/OFF: STABILIZE-Y/N/ON/OFF:  
 CAP IN PLACE-Y/N: BIOREM-Y/N: INCIN-Y/N/ON/OFF:  
 LANDFILL-Y/N/ON/OFF: TREATMENT-Y/N/ON/OFF: PUMP & TREAT GW-Y/N:

PROCESS 1:	AMOUNT 1:	UNIT1:	ADD/DEL:
PROCESS 2:	AMOUNT 2:	UNIT2:	ADD/DEL:
PROCESS 3:	AMOUNT 3:	UNIT3:	ADD/DEL:
PROCESS 4:	AMOUNT 4:	UNIT4:	ADD/DEL:
PROCESS 5:	AMOUNT 5:	UNIT5:	ADD/DEL:
PROCESS 6:	AMOUNT 6:	UNIT6:	ADD/DEL:

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    - e. Discussion of Final Action, Including Discussion of Final Letter
- COMPUTER BLANKS

X



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CURC'S INITIALS JS

4-2A-92

**\*THE COMPLIANCE UNIT HAS BEEN TRACKING SOLID WASTE VIOLATIONS SINCE MARCH 1, 1991. PLEASE CONTACT FOS FOR SOLID WASTE VIOLATIONS PRIOR TO THIS DATE.**